Listing of Claims:

1. (Currently Amended) A method for controlling a hydraulic pump for a working machine of a working vehicle having a cylinder arrangement for operating the working machine, ~~and~~ wherein the hydraulic pump ~~for supplying predetermined pressure~~ supplies oil at a specified pressure to said cylinder arrangement, and said cylinder arrangement comprises a plurality of cylinders, the method comprising:

monitoring hydraulic pressure in a bottom side of at least one of said cylinders of said cylinder arrangement relative to a predetermined pressure value;

measuring a duration time of a state in which [[a]] the hydraulic pressure in [[a]] said bottom side of said at least one cylinder of said cylinder arrangement is at [[a]] the predetermined pressure value or less;

determining that an excavating operation starts when the measured duration time equals a predetermined duration time ~~elapses~~ and thereafter, the hydraulic pressure in said bottom side exceeds the predetermined pressure value;

~~setting~~ determining a displacement of said hydraulic pump ~~at a predetermined displacement reduced to be~~ smaller than a maximum displacement of said hydraulic pump only after it is determined that the excavating operation has started such that the

displacement determination is based on the measurement of the duration time relative to the predetermined duration time and the monitoring of the hydraulic pressure relative to the predetermined pressure value; and

performing control to reduce the displacement of said hydraulic pump to the ~~predetermined~~ determined displacement.

2. (Currently Amended) The method for controlling the hydraulic pump for the working machine of the working vehicle according to Claim 1, further comprising:

determining that the excavating operation is finished when a forward and reverse travel operating unit of said working vehicle is switched to a neutral or reverse travel position from a forward travel position, on performing the control to reduce the displacement to the ~~predetermined~~ determined displacement; and

stopping the control to reduce the displacement of said hydraulic pump to the ~~predetermined~~ determined displacement.

3. (Currently Amended) The method for controlling the hydraulic pump for the working machine of the working vehicle according to Claim 1, further comprising:

determining that the excavating operation is finished when the hydraulic pressure in said bottom side becomes the predetermined pressure value or less within a first set time

previously set from the time of determining the start of the excavation operation, on performing the control to reduce the displacement to the ~~predetermined~~ determined displacement; and

stopping the control to reduce the displacement of said hydraulic pump to the ~~predetermined~~ determined displacement.

4. (Currently Amended) The method for controlling the hydraulic pump for the working machine of the working vehicle according to Claim 1, further comprising:

determining that the excavating operation is finished when the hydraulic pressure in said bottom side becomes the predetermined pressure value or less, and a hydraulic pressure state of the predetermined pressure value or less continues for more than a second set time previously set from the time of determining the start of the excavating operation, on performing the control to reduce the displacement to the ~~predetermined~~ determined displacement; and

stopping the control to reduce the displacement of said hydraulic pump to the ~~predetermined~~ determined displacement.

5. (Currently Amended) The method for controlling the hydraulic pump for the working machine of the working vehicle according to Claim 1, further comprising:

determining that the excavating operation is finished when a height of a bucket of said working machine becomes a predetermined value or more, on performing the control to reduce the displacement to the ~~predetermined~~ determined displacement; and

stopping the control to reduce the displacement of said hydraulic pump to the ~~predetermined~~ determined displacement.

6. (Currently Amended) An apparatus for controlling a hydraulic pump for a working machine of a working vehicle having a cylinder arrangement for operating a working machine, wherein the hydraulic pump is ~~and~~ a variable displacement hydraulic pump ~~for supplying predetermined pressure~~ that supplies oil at a specified pressure to said cylinder arrangement, and said cylinder arrangement comprises a plurality of cylinders, the apparatus comprising:

a bottom pressure detector for detecting a hydraulic pressure in a bottom side of at least one cylinder of said cylinder arrangement;

a displacement control device for controlling a displacement of said variable displacement hydraulic pump; and

a controller which:

inputs a detection value from said bottom pressure detector therein,

measures a duration time of a state in which the hydraulic pressure in said bottom side of said at least one cylinder of said cylinder arrangement is at a predetermined pressure value or less,

determines that an excavating operation starts when the measured duration time equals a predetermined duration time ~~elapses with~~ while said detection value is at [[a]] the predetermined pressure value or less and thereafter, said detection value exceeds the predetermined pressure value, and thereafter

outputs a displacement control signal for reducing the displacement of said variable displacement hydraulic pump to a predetermined displacement that is smaller than a maximum displacement of said variable displacement hydraulic pump to said displacement control device such that output of the displacement control signal is based on the measurement of the duration time relative to the predetermined duration time and the monitoring of the hydraulic pressure relative to the predetermined pressure value.

7. (Previously Presented) The apparatus for controlling the hydraulic pump for the working machine of the working vehicle according to Claim 6,

wherein said controller inputs therein a detection signal from an operation position detecting means for detecting an operation position of a forward and reverse travel operating means unit of said working vehicle, and stops transmission of said displacement control signal to said displacement control device when the operation position is switched to a neutral or reverse travel position from a forward travel position.

8. (Currently Amended) The apparatus for controlling the hydraulic pump for the working machine of the working vehicle according to Claim 6,

wherein said controller determines that the excavating operation is finished when said detection value from said bottom pressure detector becomes the predetermined <u>pressure</u> value or less within a first set time previously set, after determining that the excavation operation starts, and stops transmission of said displacement control signal to said displacement control device.

9. (Currently Amended) The apparatus for controlling the hydraulic pump for the working machine of the working vehicle according to Claim 6,

wherein said controller determines that the excavating operation is finished when said detection value from said bottom

pressure detector becomes the predetermined pressure value or less, after determining that the excavation operation starts, and a state at the predetermined pressure value or less continues for more than a second set time previously set, and stops transmission of said displacement control signal to said displacement control device.

10. (Previously Presented) The apparatus for controlling the hydraulic pump for the working machine of the working vehicle according to Claim 6, further comprising:

a bucket height detector for detecting a height of a bucket of said working machine,

wherein said controller inputs therein said bucket height from said bucket height detector after determining that the excavation operation starts, and determines that the excavating operation is finished when said bucket height becomes a predetermined value or more, and stops transmission of said displacement control signal to said displacement control device.

11. (Currently Amended) An apparatus for controlling a hydraulic pump for a working machine of a working vehicle having a cylinder arrangement for operating the working machine, a variable displacement hydraulic pump for supplying ~~predetermined pressure~~ oil at a specified pressure to said cylinder

arrangement, a control valve for controlling a flow rate of ~~pressure~~ oil supplied to predetermined cylinders in said cylinder arrangement and a working machine operating lever, comprising:

a bottom pressure detector for detecting a hydraulic pressure in a bottom side of at least one cylinder of said predetermined cylinders in said cylinder arrangement;

a displacement control device for controlling a displacement of said variable displacement hydraulic pump so that a load sensing differential pressure that is differential pressure of a load pressure of said predetermined cylinders and a discharge pressure of said variable displacement hydraulic pump becomes constant; and

a controller which inputs therein a detection value from said bottom pressure detector, determines that an excavating operation starts when a predetermined time elapses with said detection value at a predetermined value or less and thereafter, said detection value exceeds a predetermined value, and reduces a stroke of said control valve for a maximum stroke of said working machine operating lever to be a smaller predetermined stroke than a maximum stroke.